

It's Not All Social Inflation - Is General Inflation Back for Real?

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Agenda



- 1. Why might inflation change?
- 2. Defining "social inflation"
- 3. Some examples
- 4. Recommendations and my wish list

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Why might inflation change?



- Macroeconomics recession / recovery
- New medical conditions or treatments TBI, Opioids
- "Shock" events COVID, 9/11, war, OPEC oil embargo
- Internal insurance factors
 - Market cycle and changing deductible, limits, underwriting guidelines
 - Business shifting between E&S and admitted markets
 - Automated claims systems
 - Use of signal reserves
- Social inflation
 - · Changes in judicial environment
 - Litigation Financing

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What is "Social Inflation?"



A **broad definition** would be anything that makes insurance inflation different than economic inflation.

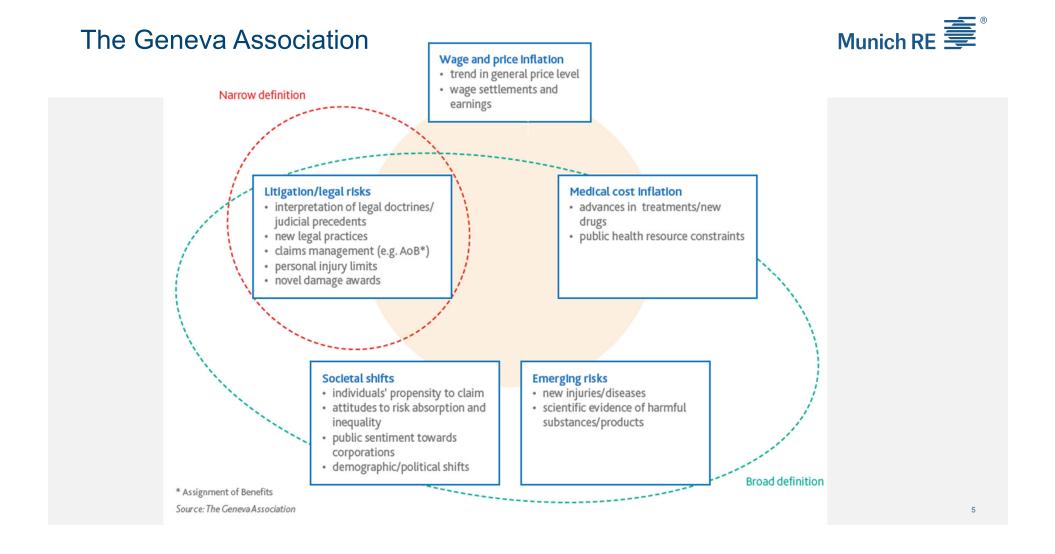
- Emerging risks like Traumatic Brain Injury (TBI)
- New medical procedures or drugs for treatment of injuries
- Crudely: everything other than CPI

A **narrow definition** would include only trends directly related to legal environment.

- Litigation Financing
- · Dynamics leading to "nuclear verdicts"

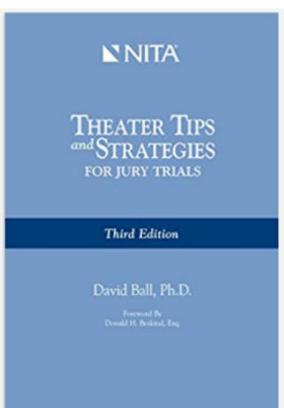
The Geneva Association gives a great visualization of this (next slide)

 $\underline{https://www.genevaassociation.org/research-topics/evolving-liability/social-inflation-brief}$



What is "Social Inflation?"





Social Inflation includes evolving legal strategies.

But how do we quantify something like this?

Amazon description:

In this new, third edition of Theater Tips and Strategies for Jury Trials, David Ball updates his methods and approaches to jury persuasion. This practical step-by-step guide helps you navigate the changes that occur in jury trials instead of being blindsided by them.

Based on both research and the experience of lawyers and trial consultants across the country, Theater Tips and Strategies for Jury Trials, Third Edition, presents techniques of the stage and screen you can use to win in the courtroom. Ball tells how to use theater concepts to persuade and motivate jurors. He tells attorneys how to look, talk, and act naturally, and to communicate the truth clearly and memorably, so they gain trust and credibility from judges and jurors.

Ball provides practical guidance for voir dire, openings and closings, testimony, and focus groups. He describes what practitioners can learn from actors about their manner, voice projection, and behavior. He explains how to grab the jury from the beginning--just as a good movie opening captures the audience. He details how to prepare your "cast" of witnesses so they testify clearly, credibly, and memorably. He offers advice on telling the story so that it commands attention and motivates jurors to argue for your side.

Modeling: What Loss Data to Use?



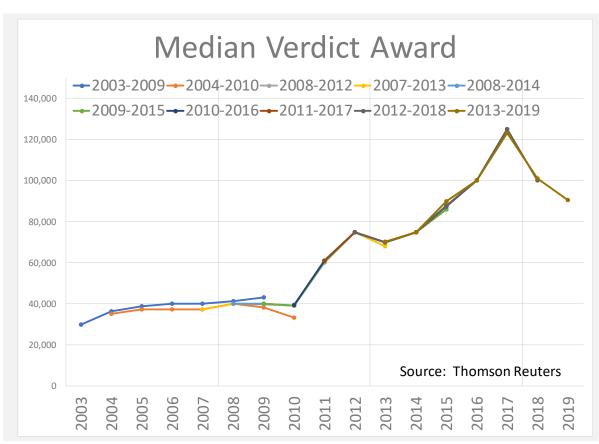
Comparison of Sources:

	Insurance Losses	Verdict Data
Problems	 Highly Skewed Truncation and Censoring (including unknown SIRs) Loss Development Only includes claims reported to the insurer (no public industry numbers) 	 Highly Skewed Mix of insured & non-insured events Missing final awards after appeals Missing many settlements Count of cases is difficult (class actions versus MDL) Missing defense costs
Advantages	Matches what we are actually covering	 Full "from ground-up" amounts "Headline" amounts are very influential to anchor future awards (even when amount is not final)

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Public Data on Social Inflation - Thomson Reuters





Thomson Reuters publishes each year a report on Current Award Trends.

This includes statistics on the most recent seven years of personal injury verdicts.

- Include compensatory damages only
- Excludes billion dollar verdicts
- No record counts (for frequency)

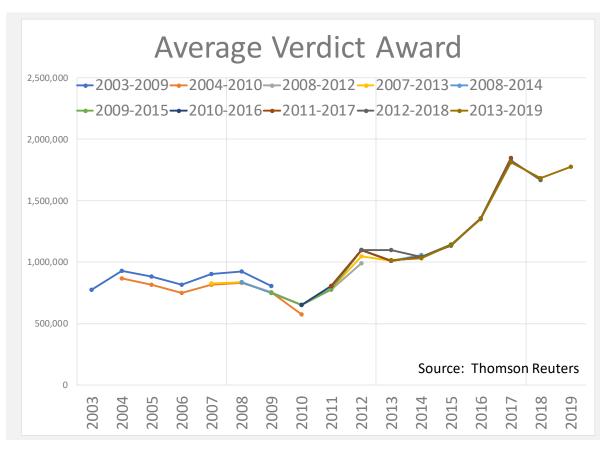
Also republished by the Insurance Information Institute (III):

https://www.iii.org/table-archive/22445

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Public Data on Social Inflation - Thomson Reuters





Amounts for verdict awards are highly skewed, so the average is generally much higher than the median.

But both show similar pattern: flat amounts for 2003-2010 and higher inflation in last decade.

Median = "midpoint" where half the verdicts are above this amount and half below.

Average = sum all verdicts and divide by the total number

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Other Trends: Traumatic Brain Injury (TBI)



Traumatic Brain Injuries (TBI) have gotten increasing attention over the last 20 years, especially related to American Football as highlighted in the 2015 movie Concussion.

TBI as an emerging exposure can add cost to many auto accident bodily injury claims and GL "slip & fall" claims. Potentially a major impact on loss inflation.

Resources:

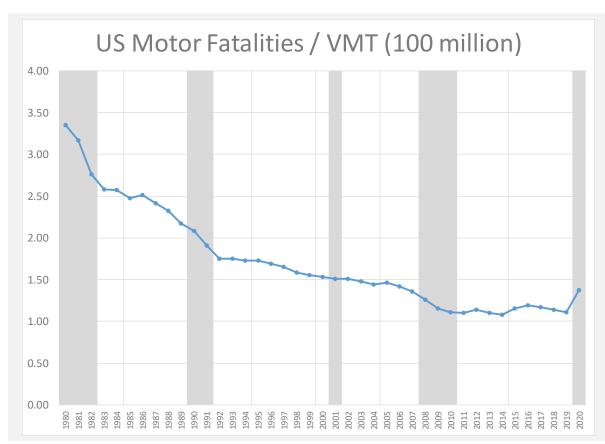
CDC: "Surveillance Report of Traumatic Brain Injury-related Emergency Department Visits, Hospitalizations, and Deaths" (2014)

https://www.cdc.gov/traumaticbraininjury/pdf/TBI-Surveillance-Report-FINAL_508.pdf

NCCI: "Traumatic Brain Injuries in Workers Compensation – Associated Medical Services and Costs" (2021)

https://www.ncci.com/Articles/Pages/Insights-Traumatic-Brain-Injuries-WorkersComp.aspx





Motor vehicle fatalities tend to correlate with auto insurance frequency.

These have historically shown decreases during recessions and increases in the subsequent recoveries.

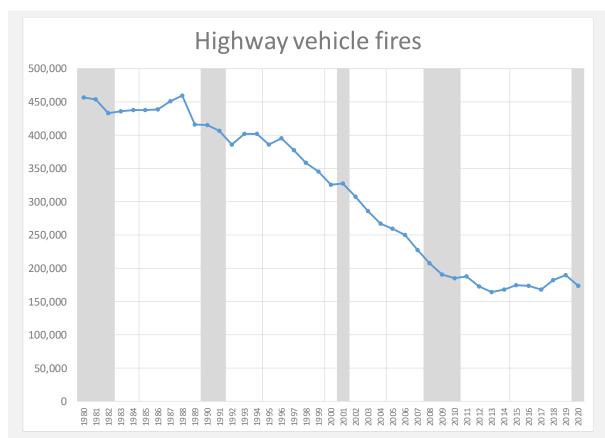
Loss severities may also be affected by the change in types of injuries throughout the economic cycle.

2020 may also be an outlier.

Source:

www.crashstats.nhtsa.dot.gov





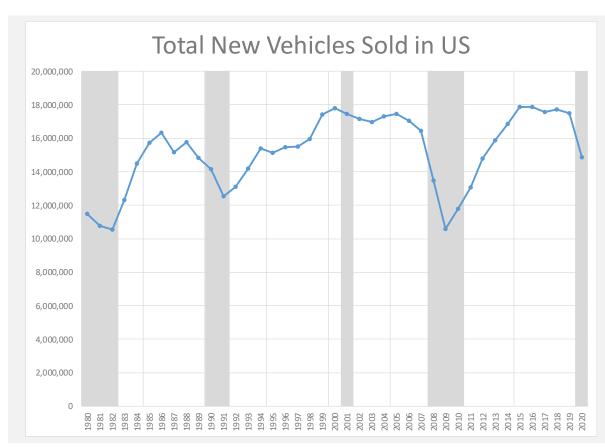
Similar pattern is observed looking at highway vehicle fires as reported by the National Fire Protection Association (NFPA).

These counts also show some correlation with auto insurance frequency with a flattening of the decrease during recoveries after recessions.

Source:

www.nfpa.org





Recessions also affect the number of new cars sold.

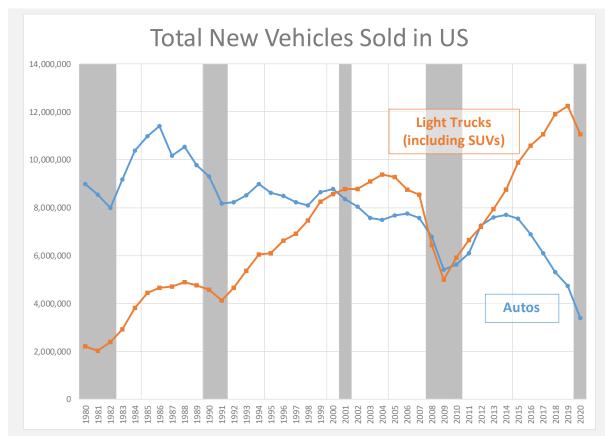
This correlates with Property Damage (PD) severity, as the likelihood of hitting a new – and more expensive – car changes over time.

But we need a long time series in order to see this relationship.

Source:

www.bea.gov





Besides the total number of new vehicles sold, there are also effects from the mix of vehicle types.

A long term trend from standard autos towards light trucks (including SUVs) is likely to have impact on auto trends.

Source:

www.bea.gov

Recommendations



- 1) Longer time series
 - Traditionally trend is estimated from latest 5 o 10 years as needed in ratemaking
 - To understand trend we need to cover multiple cycles (insurance or economic) try to get 40 years
- 2) Correlation between business segments
 - For example, if a variable affects bodily injury claims, does it have similar affect in CAL and GL?
 - A weak signal consistently observed in multiple data sets becomes a strong signal
- 3) Quantifying and testing explanatory variables
 - For economic factors: GDP, employment, VMT, sales, etc.
 - What about TBI or Opioids? Need special industry studies?

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